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Likely Predation of Adult Glossy Ibis by Great Black-backed Gulls

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ABSTRACT.—Great Black-backed Gulls (*Larus marinus*) are known to prey upon a wide range of bird species, particularly adults, young, and eggs of seabirds and waterfowl. Here, I provide the first account of Great Black-backed Gulls pursuing and attacking, in flight, a medium-sized wading bird, the Glossy Ibis (*Plegadis falcinellus*). I recorded two observations at Stratton Island, Maine, the northernmost breeding site for the Glossy Ibis in North America. *Received 12 September 2005, accepted 21 March 2006.*

Great Black-backed Gulls (Larus marinus) are well-known predators of colonial waterbirds. Many studies have attributed heavy losses of seabird and waterfowl eggs and young to this species (Hatch 1970, Mendenhall and Milne 1985, Mawhinney and Diamond 1999, Whittam and Leonard 1999, Massaro et al. 2000), particularly following human disturbance (Johnson 1938, Kury and Gochfeld 1975, Åhlund and Götmark 1989, Mikola et al. 1994). Great Black-backed Gulls have also been observed attacking and killing adult waterfowl (reviewed in Ryan 1990), seabirds (Robinson 1930; Snyder 1960; Harris 1965, 1980; Pierotti 1983; Russell and Montevecchi 1996; reviewed in Good 1998), migrating passerines (reviewed in Macdonald and Mason 1973), and even other gulls (Corkhill 1971; reviewed in Good 1998). Large birds may be seized or struck on the wing (Snyder 1960, Harris 1980, Burger and Gochfeld 1984, Ryan 1990), harassed and pursued on the water (Addy 1945, Sobkowiak 1986, Ryan 1990), or surprised on land (Robinson 1930, Snyder 1960). Here, I describe the first observation of Great Black-backed Gulls (length 71-79 cm, wingspan 152-167 cm, mass 1,300-2,000 g; Good 1998) attacking adult Glossy Ibis (Plegadis falcinellus), a medium-sized wading bird (length 48–66 cm, wingspan 92 cm, mass 500–800 g; Davis and Kricher 2000).

On 15 June 2005, I observed two aerial chases in which Great Black-backed Gulls pursued and struck Glossy Ibis in flight. Both events were recorded on a handheld camcorder (Sony Handycam Vision with 200× digital zoom) and later reviewed. All video was taken from a 6-m-high observation tower on Stratton Island (43° 31' N, 70° 19' W), a 12-ha National Audubon Society waterbird sanctuary located 2.4 km south of Prout's Neck, Saco Bay, Maine (see Kress 1998 and Chase 1994 for a detailed site description and history). The island supports approximately 100 breeding pairs of Glossy Ibis (C. S. Hall pers. comm.) and represents the northernmost nesting colony for this species in North America (Davis and Kricher 2000). Although gulls do not breed on Stratton Island (National Audubon Society gull control measures include nest destruction and shooting of gulls seen entering the island's tern colony), more than 400 Herring (L. argentatus) and Great Black-backed gulls reside on Stratton and nearby Bluff Island-an active, unmanaged gull colony less than 400 m away (CED unpubl. data).

Event 1.—At 15:30 EDT, I observed a Great Black-backed Gull adult in breeding plumage chasing an adult Glossy Ibis above the tree line of the wading bird colony. The ibis flew erratically, climbing high and then low, banking and trying to elude the gull. The aerial chase continued for about 1 min, at which point a second Great Black-backed Gull adult in breeding plumage joined in the pursuit. At 15:32, the latter gull struck the ibis with its bill, hitting it with such force that the ibis plummeted to the ground and out of view. I was unable to determine whether one or both gulls further pursued the ibis.

Event 2.—At 16:01, I again saw an adult Great Black-backed Gull pursuing an ibis in flight. At 16:06, a second adult Great Blackbacked Gull again joined in the chase and

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struck the ibis 10–15 sec later, hitting it on the back near the rump and tearing off a small section of skin and feathers with its bill. The ibis tumbled out of the air and fell into the vegetation. The latter gull immediately followed the ibis into the vegetation. Although my view was partially obscured by the vegetation, it was clear that for the next 2–3 min, the gull was trying to gain control of the struggling ibis. At one point, the gull could be seen grasping the ibis' neck in its bill. At 16:07, the gull flew away, abandoning the ibis in the vegetation.

Following the gull's departure, Audubon staff and I retrieved and inspected the ibis. It was alive but appeared exhausted, with drooping wings and little reaction to approaching humans. There were no visible injuries other than the small surface wound inflicted during the chase. We placed the bird in a box and released it several hours later.

While this is the first account of Great Black-backed Gulls attacking adult Glossy Ibis, such attacks may be fairly common at this site but seldom observed. I have observed gulls feeding on fresh ibis carcasses on several occasions but never witnessed the kill. Additionally, during an annual wading bird and seabird census in late May, I found remains of 24 adult ibis. All carcasses had been cleaned of flesh and viscera, but they retained wings and sometimes the head/neck or legs, indicating gull predation (there are no mammalian predators on Stratton, and raptors seldom visit the site). Perhaps aerial pursuit is not the usual means of capture, and/or the events are easily missed due to the dense vegetation and trees favored by nesting ibis. Audubon personnel have also seen gulls occasionally take ibis fledglings from the air and noticed fledgling remains in the wading bird colony, but they have never conducted systematic observations to quantify predation rates (C. S. Hall pers. comm., S. Sanborn pers. comm.).

In contrast, Great Black-backed Gull depredation of other species nesting on Stratton (e.g., adult and duckling Common Eiders [Somateria mollissima] and tern [Sterna spp.] eggs and chicks) is frequently observed (CED unpubl. data). In the breeding seasons of 2004–2005, few (if any) ducklings survived to fledging as a result of opportunistic, group attacks by gulls (CED unpubl. data). Some attacks involved more than 20 gulls simultaneously descending on a crèche, fighting and plunge-diving to consume ducklings. Existing gull control practices to enhance tern restoration (nest destruction and shooting of tern predators) seem to have little benefit for eiders (and perhaps ibis), as predatory gulls continue to congregate in large numbers around crèching and nesting areas.

For a small ibis colony of 100 breeding pairs, the presumed number of Great Blackbacked Gull kills reported here seems considerable and warrants further investigation. In a recent review, Davis and Kricher (2000) found no reports of predation on adult Glossy Ibis, though they described the Glossy Ibis as "an understudied species" and suggested that Peregrine Falcons (Falco peregrinus) likely take adults at some colonies. It appears, then, that this level of adult mortality is unprecedented and, if continued, could lead to colony extinction. Additional study is needed to determine whether a few "specialist" gulls prey on ibis at Stratton Island, and, if so, whether they prey on weak, sick, or otherwise unfit individuals.

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Tailless Whipscorpion (*Phrynus longipes*) Feeds on Antillean Crested Hummingbird (*Orthorhyncus cristatus*)

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ABSTRACT.—A tailless whipscorpion (*Phrynus* longipes) was observed feeding on an Antillean Crested Hummingbird (*Orthorhyncus cristatus*) atop a large

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boulder on the island of Virgin Gorda in the British Virgin Islands. This is the first record of any avian species serving as prey for an amblypygid. *Received* 13 June 2005, accepted 21 March 2006.

Whip spiders (tailless whipscorpions), or amblypygids, are members of the class Arachnida, order Amblypygi. *Phrynus longipes* is the largest amblypygid on many Caribbean islands, including the U.S. and British Virgin Islands (Lazell 2005). The average body length of *P. longipes is* ~35 mm and the an-

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